

Version Control with SVN

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based on a CVS intro by Henri Dubois-Ferrière

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Outline

- 1 A Few Words about IT at LCAV
- 2 What is SVN?
- 3 When do I need SVN?
- 4 How does SVN work?
- 5 What's next?

A Few Words about IT at LCAV

- IT maintenance load shared among the PhD students
 - Web
 - Printers
 - SVN
 - Ordering IT equipment
 - ...
- Distribution of tasks available on the LCAV's intranet webpages
 - Problems/questions? Go to see the person in charge

A Few Words about IT at LCAV

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Today: SVN, the version control system used at LCAV !!

What is SVN?

- Version control system
- Goals:
 - Manage concurrent editing of files by multiple users
 - Ensure everyone has the last update of the files
 - Keep track of successive revisions
- Replaces our old CVS system, i.e. similar features with significant improvements:
 - Atomic commit
 - Renames/moves/deletes of directories
 - ...

When do I need SVN?

- When you are working on a project with other people
- When you are writing a paper with colleagues
- When you are the teaching assistant of a course
- ... or simply for yourself

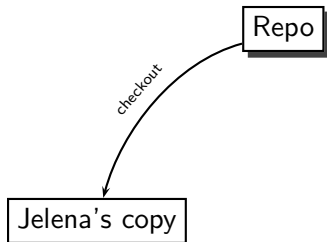
How does SVN work? (1/2)

- Case study: Jelena and Martin are writing a book
 - The files are stored in a directory BOOK_WSBC in the repository hosted at `http://icsvn.epfl.ch/1cav/BOOK_WSBC`

Repo

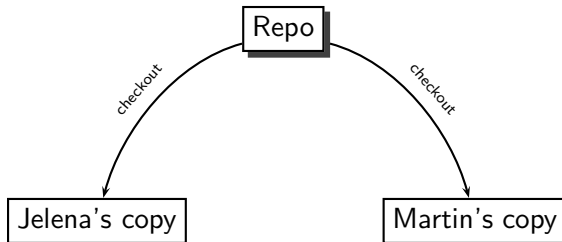
How does SVN work? (1/2)

- Case study: Jelena and Martin are writing a book
 - Jelena asks for a local copy of the directory BOOK_WSBC



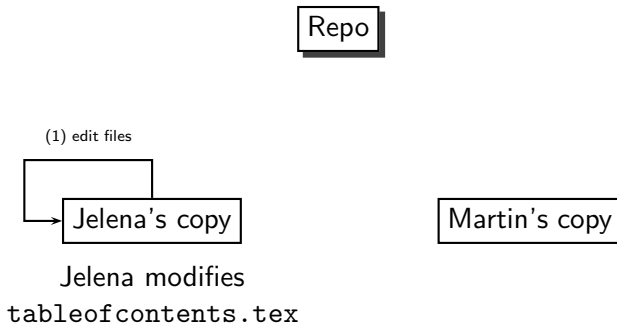
How does SVN work? (1/2)

- Case study: Jelena and Martin are writing a book
 - Martin also asks for a local copy of the directory BOOK_WSBC



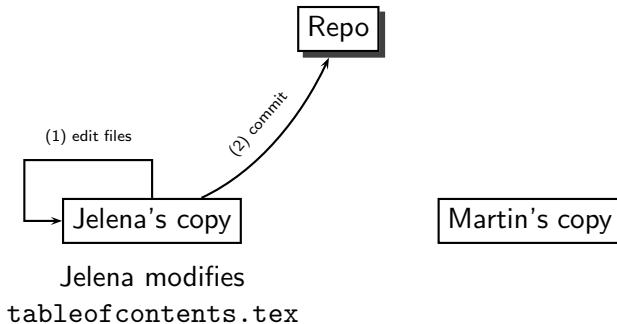
How does SVN work? (1/2)

- Case study: Jelena and Martin are writing a book
 - Jelena modifies the file `tableofcontents.tex` locally



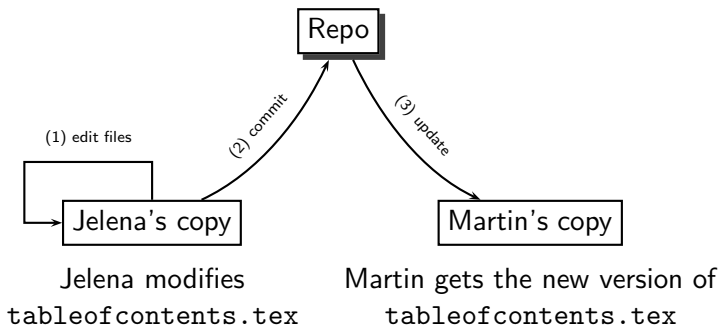
How does SVN work? (1/2)

- Case study: Jelena and Martin are writing a book
 - Jelena then commits her changes



How does SVN work? (1/2)

- Case study: Jelena and Martin are writing a book
 - Martin asks the server for the last update of BOOK_WSBC and gets the new version of the file `tableofcontents.tex`



DEMO!!

■ Documentation

- SVN website: <http://subversion.tigris.org/>
- SVN book: <http://svnbook.red-bean.com/>
- SVN help command: `$svn help`
- SVN@LCAV: LCAV's intranet webpages

■ SVN Clients

- Multi-Platform Shell: <http://subversion.tigris.org/>
- Windows GUI: <http://tortoisesvn.tigris.org/>
- MacOSX GUI:
<http://www.lachoseinteractive.net/.../svnX/>
- Multi-Platform GUI: <http://rapidsvn.tigris.org/>

On Your Side...

- Identify your SVN needs
- Read the documentation
- Go to see the person in charge to manage your access and possibly create new directories
- Use it!!